

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in this application. Please amend the above-identified application as follows:

Listing of Claims:

Claims 1-22 (previously cancelled).

23. (withdrawn) A method of purifying a pharmacological compound away from unwanted chiral forms of said compound and other contaminants in a mixture comprising the steps of:

a. combining said mixture with a target-binding moiety and a cavity-forming moiety under conditions wherein a complex is formed, said complex containing said pharmacological compound occluded within a cavity of said cavity-forming moiety, and wherein said cavity-forming moiety is not capable of occluding unwanted chiral forms of said compound and other contaminants in said mixture under said conditions;

b. separating said complex from said mixture; and

c. releasing said pharmacological compound from said complex.

24. (withdrawn) A method for producing a complex comprising:

a. a target-binding moiety, which in said complex is capable of specifically binding a target;

b. a cavity-forming moiety; and

c. a pharmacological compound,

wherein:

said pharmacological compound is present in the cavities of said cavity-forming moiety and is bound non-covalently thereto; and

said target-binding moiety is bound to said cavity-forming moiety, comprising the steps of:

i. dispersing a pharmacological compound in a pharmaceutically acceptable solution suitable for therapeutic administration; and

ii. adding a cavity-forming moiety and a target-binding moiety to said pharmacological compound under conditions which occlude said compound in a cavity of said cavity-forming moiety and form the desired complex.

25. (withdrawn) The method of claim 24, wherein said conditions are heating for less than 30 minutes at a temperature of between 40°C and 90°C followed by cooling to a temperature of between 4°C and 25°C.

26. (withdrawn) The method of claim 24, wherein said conditions are exposure to pH 1 to 5 or 9 to 14 for less than 60 minutes, followed by return to a physiological pH.

27. (withdrawn) The method of claim 24, wherein said conditions are the presence of an at least 10-fold excess of said pharmacological compound, followed by removal of any of said compound that is not occluded.

28. (withdrawn) The method of claim 24, wherein said conditions are exposure to a denaturant selected from urea or guanidine, followed by removal of said denaturant.

29. (previously presented) A method of delivering a pharmacological compound to a target in a patient, comprising the step of administering to said patient a pharmaceutical composition comprising a complex comprising

- a. a target-binding moiety, which in said complex is capable of specifically binding a target;
- b. a cavity-forming moiety; and
- c. a pharmacological compound, wherein:

said pharmacological compound is present in the cavities of said cavity-forming moiety and is bound non-covalently thereto;

said target-binding moiety is bound to said cavity-forming moiety in an amount sufficient to deliver a therapeutic amount of the pharmacological compound present in said complex to a desired target in a patient; and

said pharmaceutical composition also contains a pharmaceutically acceptable carrier.

30. (previously presented) The method according to claim 29, wherein said target is selected from the group consisting of a molecule, a cell, a tissue, an organ, a virus, a bacteria, a yeast, a fungus or other microorganism and another surface that is capable of binding specifically to said complex.

31. (previously presented) The method according to claim 29, wherein said target comprises a protein.

32. (previously presented) The method according to claim 31,
wherein said protein is a cell surface protein.

33. (currently amended) The method according to claim 31
[[or 32]], wherein said protein is a receptor.

34. (currently amended) The method according to claim 32,
wherein said cell surface protein is selected from the group consisting of a cytokine
receptor, a chemokine receptor, a neurotrophin receptor and a cell surface antigen.

35. (currently amended) The method according to claim 32,
wherein said cell surface protein is selected from the group consisting of trkA, trkB, trkC,
p75, IL-1R, IL-2R, IL-3R, GM-CSFR, EGFR, FGFR, CD33 and CD4.